## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

Claims 1-12 (canceled)

Claim 13 (new) A compound of formula I:

$$R^4$$
 $R^1$ 
 $R^2$ 
 $Ar^1(A|k^1)_rL^1$ 
 $R^5$ 
 $R^3$ 
 $(A|k^2)_mC(R^6)CH_2N(R^a)Ar^2$ 
 $R^3$ 

(I)

wherein

Ar<sup>1</sup> is an aromatic or heteroaromatic group;

each of R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> are independently selected from the formula:

$$-L^2(Alk^3)_tL^3(R^7)_u$$

in which  $L^2$  and  $L^3$  which may be the same or different in each occurrence are selected from the group consisting of a covalent bond or a linker atom or group,

t is zero or 1,

u is 1, 2 or 3,

Alk<sup>3</sup> is an aliphatic or heteroaliphatic chain, and

 $R^7$  is a hydrogen or halogen atom or a group selected from alkyl, -OR $^8$ , where  $R^8$  is a hydrogen atom or an optionally substituted alkyl group, -SR $^8$ , -NR $^8$ R $^9$ , where  $R^9$  is as defined for  $R^8$  and may be the same or

different,  $-NO_2$ , -CN,  $-CO_2R^8$ ,  $-SO_3H$ ,  $-SOR^8$ ,  $-SO_2R^8$ ,  $-OCO_2R^8$ ,  $-CONR^8R^9$ ,  $-OCONR^8R^9$ ,  $-CSNR^8R^9$ ,  $-COR^8$ ,  $-OCOR^8$ ,  $-N(R^8)COR^9$ ,  $-N(R^8)CSR^9$ ,  $-SO_2N(R^8)(R^9)$ ,  $-N(R^8)SO_2R^9$ ,  $-N(R^8)CON(R^9)(R^{10})$ , where  $R^{10}$  is a hydrogen atom or an optionally substituted alkyl group,  $-N(R^8)CSN(R^9)(R^{10})$  or  $-N(R^8)SO_2N(R^9)(R^{10})$ ;

Alk1 is an optionally substituted aliphatic or heteroaliphatic chain;

L<sup>1</sup> is a covalent bond or a linker atom or group;

Alk<sup>2</sup> is a straight or branched alkylene chain;

m is zero or 1;

R<sup>6</sup> is a hydrogen atom or a methyl group;

r is zero or 1;

R is a carboxylic acid group;

Ra is a hydrogen atom or a methyl group; and

Ar<sup>2</sup> is an optionally substituted aromatic or heteroaromatic group;

or pharmaceutically acceptable salts thereof.

Claim 14 (new): A compound of formula II:

$$R^{1}$$

$$(Alk^{2})_{m}C(R^{6})CH_{2}N(R^{a})Ar^{2}$$

$$R^{5}$$

$$N$$

$$R^{4}$$

$$O$$

$$NR^{1}R^{2}$$

$$(II)$$

wherein

R is a carboxylic acid group;

Ra is a hydrogen atom or a methyl group;

R<sup>4</sup> and R<sup>5</sup> are independently selected from the formula:

$$-L^2(Alk^3)_tL^3(R^7)_u$$

in which  $L^2$  and  $L^3$  which may be the same or different is each occurrence are selected from the group consisting of a covalent bond or a linker atom or group,

t is zero or 1,

u is 1, 2 or 3,

Alk<sup>3</sup> is an aliphatic or heteroaliphatic chain, and

 $R^7$  is a hydrogen or halogen atom or a group selected from alkyl,  $-OR^8$ , where  $R^8$  is a hydrogen atom or an optionally substituted alkyl group,  $-SR^8$ ,  $-NR^8R^9$ , where  $R^9$  is as defined for  $R^8$  and may be the same or different,  $-NO_2$ , -CN,  $-CO_2R^8$ ,  $-SO_3H$ ,  $-SOR^8$ ,  $-SO_2R^8$ ,  $-OCO_2R^8$ ,  $-CONR^8R^9$ ,  $-OCONR^8R^9$ ,  $-CSNR^8R^9$ ,  $-COR^8$ ,  $-OCOR^8$ ,  $-N(R^8)COR^9$ ,  $-N(R^8)CSR^9$ ,  $-SO_2N(R^8)(R^9)$ ,  $-N(R^8)SO_2R^9$ ,  $-N(R^8)CON(R^9)(R^{10})$ , where  $R^{10}$  is a hydrogen atom or an optionally substituted alkyl group,  $-N(R^8)CSN(R^9)(R^{10})$  or  $-N(R^8)SO_2N(R^9)(R^{10})$ ;

R<sup>6</sup> is a hydrogen atom or a methyl group;

R<sup>1'</sup> and R<sup>2'</sup> are independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, aryl, cycloalkyl, substituted cycloalkyl, heterocyclic, heteroaryl or R<sup>1'</sup> and R<sup>2'</sup>, together with the nitrogen atom to which they are attached, are joined to form an optionally substituted heterocyclic ring;

Alk<sup>2</sup> is a straight or branched alkylene chain; m is zero or 1;

Ar<sup>2</sup> is an optionally substituted aromatic or heteroaromatic group; or pharmaceutically acceptable salts thereof.

Claim 15 (new): The compound according to Claim 14, wherein R<sup>1</sup> and R<sup>2</sup> are independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, cycloalkyl, substituted cycloalkyl, or R<sup>1</sup> and R<sup>2</sup>, together with the nitrogen atom to which they are attached, are joined to form an optionally substitute heterocyclic ring provided that said substituted alkyl, substituted alkenyl and substituted cycloalkyl do not carry an aryl, substituted aryl, heteroaryl or substituted heteroaryl group.

Claim 16 (new): A compound of formula I:

$$R^{4}$$
 $(Alk^{2})_{m}C(R^{6})CH_{2}N(R^{a})Ar^{2}$ 
 $R^{2}$ 
 $R^{3}$ 
 $(Alk^{2})_{m}C(R^{6})CH_{2}N(R^{a})Ar^{2}$ 
 $R^{5}$ 

(I)

wherein

Ar<sup>1</sup> is an aromatic or heteroaromatic group;

each of R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> are independently selected from the formula:

$$-L^{2}(Alk^{3})_{t}L^{3}(R^{7})_{u}$$

in which L<sup>2</sup> and L<sup>3</sup> which may be the same or different in each occurrence are selected from the group consisting of a covalent bond or a linker atom or group,

t is zero or 1,

u is 1, 2 or 3,

Alk3 is an aliphatic or heteroaliphatic chain, and

 $R^7$  is a hydrogen or halogen atom or a group selected from alkyl, -OR<sup>8</sup>, where  $R^8$  is a hydrogen atom or an optionally substituted alkyl group, -SR<sup>8</sup>, -NR<sup>8</sup>R<sup>9</sup>, where  $R^9$  is as defined for  $R^8$  and may be the same or

different, -NO<sub>2</sub>, -CN, -CO<sub>2</sub>R<sup>8</sup>, -SO<sub>3</sub>H, -SOR<sup>8</sup>, -SO<sub>2</sub>R<sup>8</sup>, -OCO<sub>2</sub>R<sup>8</sup>, -CONR<sup>8</sup>R<sup>9</sup>, -OCONR<sup>8</sup>R<sup>9</sup>, -CSNR<sup>8</sup>R<sup>9</sup>, -COR<sup>8</sup>, -N(R<sup>8</sup>)COR<sup>9</sup>, -N(R<sup>8</sup>)CSR<sup>9</sup>, -SO<sub>2</sub>N(R<sup>8</sup>)(R<sup>9</sup>), -N(R<sup>8</sup>)SO<sub>2</sub>R<sup>9</sup>, -N(R<sup>8</sup>)CON(R<sup>9</sup>)(R<sup>10</sup>), where R<sup>10</sup> is a hydrogen atom or an optionally substituted alkyl group, -N(R<sup>8</sup>)CSN(R<sup>9</sup>)(R<sup>10</sup>) or -N(R<sup>8</sup>)SO<sub>2</sub>N(R<sup>9</sup>)(R<sup>10</sup>);

Alk1 is an optionally substituted aliphatic or heteroaliphatic chain;

L1 is a covalent bond or a linker atom or group;

Alk<sup>2</sup> is a straight or branched alkylene chain;

m is zero or 1;

R<sup>6</sup> is a hydrogen atom or a methyl group;

r is zero or 1;

R is a carboxylic acid group;

Ra is a hydrogen atom or a methyl group; and

Ar<sup>2</sup> is selected from the group consisting of moieties of formula IIIa, IIIc, IIId, IIIe and IIIf:

$$R^{5}SO_2$$
 $R^{6}$ 
 $R^{16}$ 
 $R^{16}$ 
 $R^{17}$ 
 $R^{18}$ 
 $R^{18}$ 
 $R^{18}$ 
 $R^{18}$ 

$$\mathbb{R}^{16'}$$

$$\mathbb{R}^{16'}$$

$$\mathbb{R}^{17'}$$

$$\mathbb{R}^{18'}$$

$$\mathbb{I}$$

$$\mathbb{R}^{20'}$$

$$\mathbb{R}^{21'}$$

$$\mathbb{I}$$

$$\mathbb{I}$$

where R<sup>5'</sup> is selected from the group consisting of alkyl, substituted alkyl, alkenyl, substituted alkenyl, aryl, substituted aryl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, heterocyclic, substituted heterocyclic, heteroaryl and substituted heteroaryl;

 $R^{6'}$  is selected from the group consisting of hydrogen, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, heterocyclic, substituted heterocyclic, aryl, substituted aryl, heteroaryl, substituted heteroaryl, and  $-SO_2R^{10'}$  where  $R^{10'}$  is

selected from the group consisting of alkyl, substituted alkyl, cycloalkyl, cycloalkenyl, substituted cycloalkenyl, heterocyclic, substituted heterocyclic, aryl, substituted aryl, heteroaryl, substituted heteroaryl;

R<sup>7</sup> and R<sup>8</sup> are independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, aryl, substituted aryl, heteroaryl, substituted heterocyclic and halogen;

R<sup>16</sup> and R<sup>17</sup> are independently selected form the group consisting of hydrogen, alkyl, substituted alkyl, alkoxy, substituted alkoxy, amino, substituted amino, cycloalkyl, substituted cycloalkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, heterocyclic, substituted heterocyclic and halogen;

R<sup>18</sup> is selected from the group consisting of alkyl, substituted alkyl, alkoxy, substituted alkoxy, amino, substituted amino, cycloalkyl, substituted cycloalkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, heterocyclic and substituted heterocyclic;

R<sup>20</sup> is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkoxy, substituted alkoxy, cycloalkyl, substituted cycloalkyl, aryl, substituted aryl, heteroaryl, substituted heterocyclic, substituted heterocyclic and halogen;

R<sup>21</sup>' is selected from the group consisting of alkyl, substituted alkyl, alkoxy, substituted alkoxy, amino, substituted amino, cycloalkyl, substituted cycloalkyl, aryl, substituted aryl, heterocyclic and substituted heterocyclic; and

*b* is 1 or 2;

or a pharmaceutically acceptable salt thereof.

Claim 17 (new): A pharmaceutical composition comprising a pharmaceutically acceptable excipient and an effective amount of a compound according to any of Claims 13-16.

Claim 18 (new): A method for binding VLA-4 in a biological sample which method comprises contacting the biological sample with a compound according to any of Claim 13-16 under conditions wherein said compound binds to VLA-4.

Claim 19 (new) A method for treating an inflammatory condition mediated by VLA-4 in a mammalian patient, which method comprises administering to said patient a therapeutically effective amount of a pharmaceutical composition of Claim 17, wherein said inflammatory condition is selected from the group consisting of inflammatory arthritis, multiple sclerosis, allograft rejection, diabetes, inflammatory dermatoses, asthma and inflammatory bowel disease.

Claim 20 (new) The method according to Claim 19, wherein said inflammatory condition is asthma.

Claim 21 (new): A compound according to Claim 13, wherein

Ar<sup>1</sup> is an aryl or heteroaryl group;

R<sup>1</sup> and R<sup>2</sup> are the same or different, selected from the group consisting of a halogen atom, a methyl group, a halomethyl group, a methoxy group, and a halomethoxy group;

R<sup>3</sup> is a hydrogen atom;

 $(Alk^1)_rL^1$  is -CONH-;

Alk<sup>2</sup> is absent or -CH<sub>2</sub>-;

m is zero or 1;

R is a carboxylic acid group;

 $R^6$  and  $R^a$  are each a hydrogen atom; and

Ar<sup>2</sup> is an optionally substituted monocyclic nitrogen-containing heteroaromatic group selected from the group consisting of pyridyl, pyrimidinyl, pyridazinyl and triazinyl groups.

Claim 22 (previously presented): The compound of Claim 21, wherein

Ar<sup>1</sup> is a pyridyl group; and

R<sup>1</sup> and R<sup>2</sup> are independently selected from the group consisting of fluorine, chlorine, -CF<sub>3</sub>, -CHF<sub>2</sub>, -CH<sub>2</sub>F, -OCF<sub>3</sub>, -OCHF<sub>2</sub>, and -OCH<sub>2</sub>F.